

Judith to Narragansett Pier, R. I., at Horseneck beach, Westport Harbor, Mass., at Orgunquit, Maine, at Gardiner Island and along the ocean side, Long Island, New York.—Edwin E. Calder.

PROCEEDINGS OF THE NEW YORK ENTOMOLOGICAL SOCIETY.

MEETING OF MAY 18, 1915.

A regular meeting of the New York Entomological Society was held May 18, 1915, at 8:15 P. M., in the American Museum of Natural History, President Dr. Raymond C. Osburn in the chair, with sixteen members and three visitors present.

Mr. Barber spoke of "Hemiptera Collected in Northern Florida by Messrs. Mutchler and Watson," pointing out that whereas the material used in compiling his list of Florida Hemiptera had been collected by various Museum expeditions and by Mrs. Slosson and Messrs. Davis, Van Duzee and others, mainly on the east coast and in the southern part of the peninsula and had proved rich in West Indian forms, the present lot of material had been collected mainly in the northwestern part of the State, adjoining the mainland of Alabama and Georgia, and had proved poor in West Indian forms, and practically identical with the fauna of the Gulf Strip.

The extreme southern character of the fauna was shown not only by the species collected but by the poor representation of Capsidæ or Miridæ. Among the more notable captures were *Chilianella productilis*, *Largus davisii*, and *Matapodius confraternus*.

The paper was discussed by Messrs. Olsen, Davis and Schaeffer, bringing out the fact that the Miridæ, while deficient in southwestern states and West Indies, were comparatively plentiful through Mexico and Central America.

Mr. Engelhardt exhibited specimens of the Sesiid moth, *Memytrus palmi*, described from Florida from a specimen now in American Museum collection, and known from another Floridian specimen in Mr. Palm's collection and numerous examples from North Carolina and other localities northward to Long Island, commenting upon its preference for white and red oak and, to a less degree, scarlet oak, and its resemblance to yellow-jacket wasps. He said that its habit of breeding in the larger branches made it usually difficult to collect in numbers, but that it had been fortunate in finding a locality near east New York, where the cutting down of the trees had compelled it to breed in smaller and more accessible branches, so that upwards of fifty infested pieces had been cut off. One of these was exhibited to show the work of the larva, circling around the branch during its first season and entering the heart wood the same fall or second year, and the pupa in its burrow in the very center of the branch.

Mr. Comstock spoke of his experiences with Mr. Watson in 1914 and with

Mr. Woodruff this year in collecting Lycenidæ at Greenwood Lake, particularly in reference to *Incisalia henrici*, which at the same date and locality proved less abundant this year than in 1914, when on May 3 a few were found and on May 10 about twenty were taken on the top of a knoll (about 1,200 feet elevation) two hours' walk from Glen Station. *Anthocaris genutia* was very abundant both years and other Lycenidæ were found, *irus*, *augustus*, etc., but the absence of *henrici* this year was remarkable. Mr. Comstock closed with a discussion of food plants in which Messrs. Davis and Engelhardt joined.

Mr. Engelhardt remarked on the abundance of *Anthocaris genutia* on April 24 in Dutchess County, N. Y., near the Connecticut state line, where the *Arabis*, on which it feeds, was also abundant.

Mr. Wm. T. Davis stated that he had spent the 6th and 7th of May at Lakehurst, N. J., and at night had found many moths on the flowers of the beach plum, *Prunus maritima*, among them were *Graphiphora subterminata* Smith, *Graphiphora culea* Gro. and *Jodia rufago* Hüb. At sugar there were five species of *Phaeocyma* and the bug *Largus succinctus* Linn. Five individuals of this last-mentioned species were present and a pair were in copulation. This species also occurs at night on flowers. Adults have been found at Lakehurst in April, May and June; in July nymphs, and adults again in late August and in September. It has also been found in copulation on June 4.

Mr. Davis remarked also that on account of their different dates of blooming, one might use skunk cabbage, willow bloom and beach plum in succession for night collecting and thus prolong the season.

Mr. Leng exhibited small branches of dogwood infested by the scolytid beetle, *Phlaotribus frontalis*, showing the characteristic clusters of sawdust at the entrances to the numerous burrows, and said they had been collected by Mr. H. W. Wenzel on May 10 near Philadelphia.

Mr. Dow exhibited a cocoon from Panama and several other insects, living and dead.

Dr. Osburn spoke briefly of his new home at No. 358 Mahegan Ave., New London, Conn., and said he hoped to have visits there from members of the Society interested in the varied collecting of that locality, where fresh and tide water shores, hills and plains would, he felt sure, prove remunerative.

After refreshments the Society adjourned to the first Tuesday in October.

MEETING OF OCTOBER 5, 1915.

A regular meeting of the New York Entomological Society was held October 5, 1915, at 8:15 P. M., in the American Museum of Natural History, Vice-President H. G. Barber in the chair, and twenty members present, with three visitors, including Mr. H. H. Knight, of Cornell University.

Dr. Lutz exhibited two luminous larviform insects received from C. L. Holmes, Waterbury, Conn., similar to others collected by himself at North Mountain, Pa., and received from Tompkin's Cove, N. Y., and referred to an illustrated article by Riley in Am. Ent., 1880, apparently referring to the same

insect, which in the dark looked like a miniature trolley car from the luminous spot on the sides of each segment. Mr. Schaeffer said he believed it was the female of *Phengodes laticollis*, but should be referred to H. S. Barber in Washington, who had specially studied the subject, and to whom he had sent similar specimens from Yaphank, L. I. The discussion that followed brought out the error in the suspicion of early authors that these luminous creatures were larvæ of *Melanactes*, *Asaphes* or other Elateridæ, the successful work of H. S. Barber having shown them to belong to Lampyridæ.

Mr. Mutchler exhibited in advance of a complete report on the expedition to Porto Rico: *Tetracha sobrina* taken at Ensenada, P. R., June 14; *Cicindela hebræa* taken at Anasco, P. R., September; *Cicindela boops* taken at Ensenada, P. R., June 14; *Cicindela trifasciata* taken at Ensenada, P. R., June 14, and a *Cicindela*, apparently new, taken by Mr. Watson in San Domingo.

Mr. Watson exhibited Sphingidæ donated to the Museum by Mr. B. Preston Clark, of Boston, with a collection of American Sphingidæ, containing 34 species, new to the collection, mostly subtropical, and including the new *Hemoplanes acuta* R. & J., from Bolivia.

Mr. Shoemaker spoke briefly of his summer collecting at Washington, D. C., and at Slide Mt., in the Catskills, the latter resulting in the capture of about 1,800 beetles and 500 to 600 Lepidoptera. On the September visit to Washington he was accompanied by Mr. Nicolay and their joint efforts yielded twenty-two specimens of *Cychnus*.

Mr. Nicolay described their joint efforts in greater detail, regretting the comparative failure of bait bottles on account of cold nights, but extolling the merits of the Virginia shore of the Potomac River, opposite Plummer's Island, where their success under small and moderate-sized stones led to search beneath larger ones, until, as he expressed it, they were "moving the landscape a little." *Pterostichus purpuratus* was common and *P. approximatus* and other desirable Carabidæ were found, while Parnidæ were seen crawling like spiders on wood pulled out of the water into the sunshine, and *Cremastochilus* sp. was found under a stone with ants, which dragged it down under the soil when disturbed.

Mr. Davis said in his experience *Cremastochilus* buried itself, but Mr. Nicolay repeated that in this instance two ants pulled on the front legs while he pulled on the hind legs.

Mr. Nicolay also spoke of Cicindelidæ caught at Mt. Pocono, Pa., and promised to show them at the next meeting.

Mr. Dow mentioned the death on August 24 of J. Turner Brakeley, of Lahaway, and his friendship with Smith Grossbeck and the two Wenzels, and promised a paper on his personal characteristics and entomological activity for next meeting. He exhibited specimens caught at Lahaway this summer and at Allaben in the Catskills where he met Pearsall and Crosby commenting especially on the abundance of *Strategus antæus* and *Cicindela lepida* at Lahaway, where the burrows of the latter could be found only two or three feet apart in perfectly smooth grassless places of white sand. He donated *Arctia caia*

from Allaben to the local collection and a number of other specimens to the members present.

Mr. Olsen, referring to a European Aphid previously reported by him as occurring in this country, added that he had learned from Gillette of its occurrence in other parts of the United States.

Mr. Sherman spoke of his visit to the White Mountains in September and especially of the increased facilities afforded for collecting by the permanent camps on the summit, at the Lake of the Clouds, which is in the heart of the alpine garden, and of the prospect of additional camps being built at Hermit Lake and in the Great Gulf. Many new trails have been added by the Appalachian Mountain Club. He met Sheriff, of Boston, while in the mountains who showed him a *Carabus chamissonis* found under a stone, still entirely white, though it darkened in a few hours.

Mr. Engelhardt spoke of his visits to Pleasant Valley, in the foothills of the Berkshires, where he had good collecting, particularly at night, and was pleased to find the postmaster a naturalist. He described particularly a bait bottle in which a mouse, accidentally caught, died and served to attract Silphidæ in such numbers that the bottle was entirely filled.

Mr. Sleight spoke of the material collected abroad by Mr. Holinan and sent to him.

Mr. Davis spoke briefly of his visit at the end of May to Rock City in the western part of the state and of several visits to Long Island, exhibiting dragon flies caught by shooting charges of fine shot at them with a sling shot. He also read a letter from Charles Dury, in reference to the latter's journey through Arizona, Nevada and California, and showed a copy of the recent work by Bentley B. Fulton, "The Free Crickets of New York: Life History and Bionomics," being Tech. Bull. No. 42 issued by N. Y. Agl. Exp. Sta., Geneva, N. Y., to which he gave the highest commendation as the first complete and accurate treatment of the subject, regretting only that a botanical error appeared on page 30, where the bur oak (*Q. macrocarpa*) should be the post oak (*Q. minor*), the bur oak not being found, so far as known, on Long Island. The error is repeated on page 27. Dr. Lutz called attention to the return of W. S. Genung, known some years ago by his collections in Georgia, Florida, Cape Breton and Newfoundland, to entomological activity in his seventy-second year, his present address being New Augustine, Fla.

Mr. Woodruff spoke of finding an unusual dragon fly again at Litchfield, Conn., from June 30 to July 15, the species being *Leucorhinia frigida*, and represented by males only.

Mr. Bird spoke of his continued search for boring lepidopterous larvæ and said he had now succeeded in finding another species within the fifty-mile limit.

Mr. Hall exhibited a Staten Island specimen of *Limenitis ursula* var. *albofasciata* taken by Oscar Fulda, August 22; and commented on other local records for this rare form.

Mr. J. W. Angell spoke of collecting at Twin Lakes, Conn., in favorable

terms, and exhibited thirty-five exotic *Neolamprina* and a series (14 ♂♂, 4 ♀♀) of *Lucanus elaphus*.

Mr. Schaeffer spoke of expeditions to West Point with Colonel Robinson and of various new Long Islands records of which he will furnish details at a later meeting. Mr. Leng exhibited some Coleoptera taken on Staten Island by his son, which, as far as new to the local list, will be mentioned in short notes. These included also *Ochthebius foveicollis* and *Hydraena pennsylvanica* from Willow Brook, near Bull's Head, where the growth of *Anacharis* in the water and the protruding willow roots on the banks made excellent collecting for aquatic species, especially Parnidae, which occur in great numbers.

Mr. Schaeffer mentioned, in connection with the West Indian List, the occurrence in Trinidad of two new species of Eucnemidae.

Mr. Barber spoke of his experiences at Lakehurst in September, where the rains had caused an unusually verdant appearance and remarkably poor collecting.

Mr. Knight, commenting on *Malachius aeneus*, said it was very common at Batavia, N. Y.

MEETING OF OCTOBER 19, 1915.

A regular meeting of the New York Entomological Society was held October 19, 1915, at 8:15 P. M., in the American Museum of Natural History, Vice-President Harry G. Barber in the chair, with fourteen members present.

On motion the following were elected to active membership in the Society, viz.: W. D. Funkhouser, 415 N. Tioga St., Ithaca, N. Y.; M. D. Leonard, Department of Entomology, Cornell University, Ithaca, N. Y.; Lawrence H. Dunn, Board of Health Laboratory, Ancon, Canal Zone.

On motion, Dr. F. E. Lutz was elected a delegate to the Second Pan-American Scientific Congress, with C. W. Leng as alternate.

Mr. Nicolay exhibited a collection of "*Local Cicindelidae*" in reference to which he said in part that since 1910 he had collected personally or obtained by exchange twenty-five species and varieties. A series of *C. patricula* from Pocono, Pa., where this species is plentiful early in September at a place locally called the Knob, was illustrated by photographs of the locality; as was a series of *C. limbata* from the wagon road approaching the summit of Storm King Mountain, near West Point, N. Y. Brownish forms of *C. purpurea* from Pocono and a green specimen collected by Mr. Pearsall in the Catskills Mountains were subjects of comment. In reference to *C. harrisi*, Mr. Nicolay said that no typical *C. sex-guttata* were found with it, and while it might be an altitudinous form of that species, it could scarcely be a senile form, since its peculiar color was developed only in the mountains. In regard to local races, Mr. Nicolay pointed out that *nigrita* was not apparently approached in the Chesapeake Bay race of *hirticollis*, as it was at Rockaway Beach, and Mr. Davis added that it was only on Long Island that immaculate forms of *modesta* were locally found, Aqueduct being the great center. At Lakehurst, though the species were found in numbers, such variations were so far unknown. Messrs. Shoemaker and Angell joined in the discussion.

Mr. Dow, under the title "A Pilgrimage to Lahaway," described the strong character of the late J. Turner Brakeley, dwelling upon the aid he had given John B. Smith and others, and the lovable nature that dominated his career in spite of his many eccentricities. As this paper will later be published in full, no extract is given.

MEETING OF NOVEMBER 2, 1915.

A regular meeting of the New York Entomological Society was held November 2, 1915, in the American Museum of Natural History, at 8:15 P. M., Vice-President Harry G. Barber in the chair, with eleven members and two visitors present.

Mr. Dickerson spoke on "Insects of Season of 1915," dwelling particularly on those of economic importance, and pointing out the opportunities for collecting on the masses of flowers in commercial nurseries and the liability of European insects being found there from the growing practice of importing shrubs with balls of earth about the roots.

The European Mole Cricket, *Gryllotalpa gryllotalpa* L., found in this way at Rutherford, N. J., by Weiss and determined by Rehn, was shown as an example; also *Exochomus 4-pustulatus*, Rutherford, July 10, and Riverton, March 29, from bay trees imported from Belgium in the nurseries; *Plagiodera versicolor*, found on willows in nurseries at Rutherford, and *Carabus nemoralis* as additional examples among Coleoptera. In some cases the origin of the insects was an interesting problem. The Tingid, *Leptobyrsa explanata*, for instance, is a native insect found on wild azalea, and is also found in nurseries on imported rhododendrons perhaps from confusion with a similar European insect, perhaps from prior introduction in Europe on rhododendron stock brought from America. *Leptophya mutica* Say is another species found on fringetree (*Chionanthus virginica*) in southern New Jersey. *Otiorhynchus sulcatus*, a beetle common to Europe and America, is also found in nurseries, the adults damaging the leaves of rhododendron, but possibly being introduced also in the earth about the roots. Its habits are mainly subterranean and it is easily trapped under boards.

Mr. Dickerson also spoke of the varying plenty of certain injurious insects in different years. An abundance of plant-lice in the early summer was noted combined with a scarcity of lady bugs. The injury to apple foliage was great, in which connection Mr. Dickerson spoke of the necessity of spraying just as leaf buds begin to swell, as emphasized in Bulletin 402, "Controlling Plant Lice in Apple Orchards," by R. J. Parrott, and of the effect of combinations of nicotine in the spraying mixture. The tanglefoot joint as a remedy for peach tree borers was also mentioned. The varying plenty of the catalpa sphinx, especially on *Catalpa bungei* in nurseries, was also alluded to. It was not abundant this year but may be next year, since its parasite was also scarce.

Mr. Dickerson exhibited also *Adalia humeralis* from Nutley, N. J., June 16, *Blethisa quadricollis* Hald, a specimen taken at Arlington, N. J., April 10, in a wet situation, thus confirming the single record in the New Jersey List;

a botfly, *Cuterebra buccata* Fab., determined by Mr. Davis, found on sidewalk in Irvington, N. J., a *Psychoda cinerea* Banks, found in the bathroom; and the European pine tip moth, *Evetria buoliana* (to which Bulletin 170, U. S. Dept. of Agriculture, is devoted), which fortunately has not spread rapidly here, but is so serious a pest in Europe that 150,000 larvæ have been gathered and destroyed in one locality. Mr. Busck has investigated its appearance on Long Island and the importation of pines has been stopped.

Mr. Dickerson spoke also of the attacks of a *Chactocnema*, similar to *C. confinis* (which is known to attack sweet potato and bindweed), on cultivated mallow in a nursery at Rutherford; and of the larvæ of Barini working in the lower stem of *Gaillardia* and other cultivated composites. He closed by urging greater attention to such nurseries by collectors.

His remarks were followed by a general discussion of the subjects introduced.

Mr. Leng stated that in addition to *Otiiorhynchus sulcatus* the European species, *O. auricapillis*, was known to have been introduced with imported stock at Cromwell, Conn. (fide W. D. Pierce), and *O. singularis* was reported from several localities by New England collectors and by Mr. Shoemaker.

Mr. Davis said the catalpa sphinx always flew ahead of its parasite and was liable for two or three years to defoliate the trees, as at Lakehurst a few years ago, but the parasite soon followed, and thereafter held it in check.

Mr. Angell spoke of the various localities for *Carabus nemoralis* to which Mr. Davis added Staten Island.

Mr. Davis also added Staten Island to the localities for *Plagioderia versicolor* Laich. (*armoracia* Fab.), his earliest record being August 3, 1911, in the Clove Valley. This year on October 9 numbers were found under willow bark at Bull's Head, where it had also been taken in July on the willow leaves by C. W. Leng, Jr.

Mr. Davis spoke of its identification by Mr. Schwarz from specimens he had taken to Washington and Mr. Woodruff added that Mr. Schaeffer had sent him the same name. Mr. Dickerson added also that specimens from New Jersey had been sent him two or three years ago, so that this European enemy of willow and poplar might be considered fairly established near New York City.

Mr. Davis exhibited the description of the species under the name *armoracia* in Stephens' Manual of British Beetles, saying that it was not safe to leave a generic name out over night and perhaps scarcely a specific name. He commented also on the more natural appearance of specimens killed in cyanide; and exhibited specimens of *Micromalthus debilis* given him by Mr. Herbert S. Barber and the latter's interesting work on its varied method of reproduction.

Mr. Barber exhibited *Carthasus rufonotatus*, which he could now add to the New Jersey List. His remarks will be printed in Short Notes.

Mr. Davis exhibited his collection of Long Island Cicindelidæ, commenting especially on the ancient record for *C. unipunctata* and recent captures of *C. consentanea* by Mr. Schott at Wyandanch, L. I., April 24; by Mr. Harris at

Quogue and Westhampton in September and by Mr. Wood at Port Jefferson, on a gravelly bluff sloping down to the beach.

He also showed the varied forms of *C. rugifrons* and *C. modesta* taken in one day's collecting at Aqueduct and said while that locality was destroyed, a smaller dune further along the shore was still good.

Mr. Harris recalled the work of Mr. Johnson and Mr. Joutel at Aqueduct, and spoke of his own recent trip to Oak Island, across the Great South Bay, where Johnson lost his life, to obtain the *dorsalis*, *hirticollis* and *repanda* that the latter had collected there. He spoke also of *C. munifica*, a large form of *dorsalis*, with broad conspicuous bronze markings, which he had received from Professor Calder, of Providence, who had collected it at Narrangansett Pier, so far as known, the most northern locality for the species; and of the gradual disappearance in dried specimens of *rugifrons* of the brassy color sometimes noted in the field.

Mr. Davis said the same change in color might be noted in *C. 6-guttata*, specimens in old collections being often of a more violet shade.

Mr. Angell recorded finding *C. 6-guttata* on October 12. Mr. Dow exhibited plaster cast from Lahaway of a spider burrow and another of *Cicindela modesta* and spoke of the characteristic form of burrow made by each species.

Mr. Rich spoke of the presentation at Ithaca by Mr. Leach of the U. S. Bureau of Entomology of some of the economic matters mentioned by Mr. Dickerson, particularly regarding peach tree borers.

MEETING OF NOVEMBER 16, 1915

A regular meeting of the New York Entomological Society was held November 16, 1915, in Heim's Restaurant, at 8:15 P. M., with Vice-President H. G. Barber in the chair and eighteen members and five visitors, viz.: Mr. Henry Brown, a member of the Soc. Ent. of France; Mr. H. L. Viereck, of the Washington Biologists' Field Club; Mr. Harry B. Weiss, of the New Jersey Agl. Exp. Sta.; Mr. Herbert Lang and Mr. James C. Chapin, of the American Museum Congo Expedition, and Mr. Stephen G. Rich, present.

The curator reported a donation from Mr. Dickerson to the local collection; and resumption of the study of the Coleoptera thereof on Saturday, November 20, at 2 P. M., the subject being the family Cleridæ.

The secretary read letters from several members, including Messrs. Green, Bird, Love, Knapp, Groth, Wunder and Joutel, regretting their inability to attend the supper which preceded the meeting.

Mr. Laurence V. Coleman, 150 Maple St., Brooklyn, was elected to active membership.

Mr. Dow reported for the committee on Lahaway that Mr. J. W. Angell and he had again visited the Plantation.

Messrs. Davis and Leng spoke of their recent visit to Washington, of the friends with whom they had visited while there, and of their scientific results, which will be printed in the JOURNAL. Mr. Davis also exhibited photographs of persons and places and a printing press for locality labels obtained from

Herbert S. Barber, by which any number of labels may be quickly prepared. Mr. Leng showed the recent Report No. 107 by F. C. Craighead on "Larvæ of the Prioninæ."

Mr. Engelhardt read a paper on the "Mecoptera of N. E. United States," which will be printed elsewhere.

Upon invitation by the chairman, several of the visitors spoke briefly expressing their gratification.

Messrs. Lang and Chapin, referring to the entomological results of their Congo Expeditions, said that they were novices in entomology and that Mr. Davis was largely responsible for their exertions in that direction; Mr. Chapin disclaimed any strong affection for the skin beetles, termites and driver ants that in various ways hindered their work. He said that actually they depended more or less on native help, such as boys stationed along the road with nets or visiting other localities of which they know. One elderly ex-soldier, *Kaseesa* by name, but nicknamed "Peperua" (= butterfly in Medje language), because he was often employed to use the butterfly net, had been very serviceable, though once his hunger for fresh meat led him to assail with his net a native hunter carrying an antelope, and while his stratagem secured the desired delicacy, there was trouble next day when the scared hunter got over his fright.

Dr. Lutz, speaking of the entomological collections they had brought back, said that scarcely a third had been unpacked and that they were evidently very extensive and most important additions to the American Museum stock of insects. He only regretted that lack of competent workers in the country would necessarily retard their study and urged the specialists in the Society to aid the Museum in working up this valuable material.

Mr. Doll and Mr. Benedict spoke briefly of their pleasure in being able to attend the meeting.

Mr. J. W. Angell described the Lahaway Plantation, mentioning the accommodation obtainable at Prospertown, close by, the good condition of the buildings, the attractive features, including the many different environments for collecting, and the complete isolation of the great forest which had not been cut for forty years. He urged that it be acquired, since in years to come increasing cultivation would make such an opportunity unlikely to recur.

MEETING OF DECEMBER 7, 1915.

A regular meeting of the New York Entomological Society was held December 7, 1915, at 8:15 P. M., in the American Museum of Natural History, Vice-President Harry G. Barber in the chair, with twenty-one members and three visitors, including Mr. Harry B. Weiss and Mr. H. L. Viereck, present.

The curator reported gift of *Pterostichus purpuratus* from Mr. Shoemaker; also the completion of the local collection of Cleridæ, and announced a special meeting of Coleopterists on Saturday, December 18, at 2 P. M., for the study of the Malachiidæ.

The following were elected to active membership: Stephen G. Rich, Harry B. Weiss, Henry Brown.

Mr. Howard L. Clark, North Farm, Bristol, R. I., was proposed for active membership by Mr. Bird.

Mr. Bird presented a paper on "*Xanthacia buffaloensis* Grt., its larval history and occurrence within our fifty-mile faunal zone," which will be printed in full in the JOURNAL. He exhibited specimens, dilating upon the clypeal tubercle and its possible use; and referring to the occurrence of the species within the city limits, said he had found the larvæ in New Jersey on their now known food plant, *Saururus cernuus* L., and they would probably be found also on Staten Island.

Mr. Bird also added *Nonagria laeta* to the local list and made known its food plant, *Sparganium*, which has not hitherto been recorded.

Mr. Leng exhibited a specimen of *Otiorhynchus sulcatus* in which one of the deciduous cusps was present, while the other was lacking, so that its scar on the mandible could be seen; and compared the use of the cusps in breaking through the pupal stage with the clypeal tubercle shown by Mr. Bird.

Dr. Lutz, commenting on Mr. Bird's remarks, said that special horns, spines, etc., could not always with safety be ascribed to special uses, since such were often the marks of old, specializing stock.

Mr. Dickerson exhibited pink and green specimens of *Amphiscepa bivittata* Say, collected at West Norwood, N. J., August 28, by sweeping, both sexes being represented, and referred to the fact that pink insects were usually found in the fall.

Mr. Davis mentioned Professor W. M. Wheeler's resumé of facts concerning pink insects.

Mr. J. W. Angell spoke of the combats between males of *Lucanus cervus* in which the mandibles were used as weapons and quoted Janson's experience with them, in which the elytra were found greatly damaged.

Mr. Dow exhibited a pine snake from Lahaway which had swallowed a partridge egg, and a number of curious nests made by wasps from the same locality, in which coat hooks, door hasps, etc., had been utilized by the insects.

Mr. Viereck later, commenting upon them, said that *Sceliphron solitarius* was the architect responsible for most of them.

Mr. Weiss exhibited *Eucactophagus graphipterus* Champ., a Calandrid weevil found at Summit, N. J., in greenhouses where orchids with soft bulbs, like *Odontoglossum*, were grown. A more complete account will be printed in Miscellaneous Notes.

Mr. Davis exhibited insects collected in Cuba by Mr. M. R. Harrington while engaged in archaeological work. Many came from a cave near Baracoa where the walls were in places covered with roaches; and others included *Pyrophorus*, *Elaphidion*, *Stenodontes* and other Coleoptera as well as Pentatomids and Cicadas.

Mr. Davis also read "Additional Records of the Deer Bot-fly," which will be printed in Miscellaneous Notes, and exhibited it and allied species of *Cuterebra*.

Mr. Leng exhibited the West Indian Lycidæ of the American Museum and

National Museum combined and commented on the distribution of genus *Thonalmus*, one section of which is apparently confined to Cuba and the Bahamas, while no species at all occur in Porto Rico.

Mr. Leng also read a letter from F. G. Schaupp, written in 1892, recounting his first experiences in America in 1866.

Mr. Barber exhibited two European species of *Lygæidæ* occurring in N. E. America, one, *Stygnocorus rusticus*, having been already reported by Horvath in 1910, the other, *S. pedestris*, having been lately found in Nova Scotia and brought to his attention by the Bussey Institution.

Mr. Nicolay spoke of his visit via Dyckman St. Ferry to Palisades Interstate Park and regretted that the natural scenery and conditions had been greatly damaged by ill-advised attempts to improve them. Mr. Davis fully endorsed his views, saying that greater destruction had been wrought by order of the commissioners than an irresponsible horde of picnickers could possibly accomplish if bidden to do their worst for an entire Sunday. He referred also to the formal protest filed by the Linnæan Society and furnished extracts from the proceedings of that Society.

Mr. Harris spoke of his visit to Washington and his studies with Mr. Schwarz of the U. S. National Museum collection of *Cicindelidæ*, remarking particularly on the liability of species supposed to be exclusively Central American to occur in Arizona, New Mexico or Sonora. A form of *C. argentata* found by Oslar in Sonora, and *C. segnis*, related to *C. debilis*, found in Arizona by Eugene Smythe being examples.

MEETING OF DECEMBER 18, 1915.

A regular meeting of the New York Entomological Society was held December 18, 1915, at 8:15 P. M., in the American Museum of Natural History, Vice-President Harry G. Barber in the chair, with twenty members and one visitor, Mr. Howard Notman, present.

The curator reported that the local collection of *Malachiidæ* had been completed and that the subject for study on January 15 would be the family *Cistelidæ*.

Mr. Schaeffer for the Publication Committee reported progress with the Van Duzee List, which had been delayed by the printer and by corrections received from the author.

Mr. Dow, in seconding the nomination of Mr. Howard L. Clark, recalled that gentleman's forty-two years of entomological activity and moved that he be elected by affirmative ballot cast by the secretary.

Mr. Clark was thereupon elected an active member.

Mr. Dow nominated Mr. Howard Notman, of 136 Joralemon St., Brooklyn, for active membership.

Mr. Davis announced the death on December 15 of Ignaz Matausch, a member of the Society for many years.

On motion, Mr. Mutchler was appointed a committee to prepare an obit-

uary notice for the JOURNAL; and the secretary was instructed to express by letter to the widow the regret of the members.

The chairman appointed Messrs. Dickerson, Dow and Sleight a committee to prepare nominations for officers for the ensuing year.

Mr. Nicolay exhibited his collection of "Local Gyrinidæ" and other families of aquatic beetles and described methods of capture and local environment. He also showed sheets prepared for the N. Y. State List and enlarged photographs of the scenes amid which he had collected.

Mr. Davis, adverting to his remarks on the sunbasking habit of Gyrinidæ, recalled his printed observations,¹ and especially his experience at Pine Island, N. Y., with Mr. Woodruff when *Dineutes discolor* and *Gyrinus dichrous* were seen in separate assemblages, though on the same submerged tree, basking in the sun, and dropping off, one by one, when disturbed, like turtles.

Mr. Schaeffer and Mr. Leng spoke of the taxonomic difficulties involved in some of these groups, and the latter referred also to the work in progress by Mr. H. H. Knight, of Ithaca, on the Parnidæ.

Dr. Lutz, in the absence of Mr. Viereck, exhibited and spoke briefly of the parasitic Hymenoptera of Porto Rico.

Mr. Davis exhibited photographs received from Mr. Clarence Shoemaker of Messrs. Nicolay and Shoemaker at work along the Potomac, and quoted the nickname "Energy Shoemaker" as applied in Washington to the latter.

Mr. Shoemaker exhibited and donated to the local collection specimens of *Semiophora gristra*, taken at Lakehurst in October and identified as a rare moth by Dr. Forbes; also *Catocala amatrix*, captured as it flew alarmed from the pine trees, and *Xylina pexata*. He remarked upon the benefit he had already derived from the local collection in its incomplete condition and urged upon all members the advantage of completing it as rapidly as possible.

Mr. Weiss exhibited and donated to the local collection specimens of *Antonina crawi*, the cottony bamboo scale, found at Riverton, N. J., in August, an introduction from Japan; *Rhopalosiphon ligustri* Kalt., the privet plant louse, found in Jersey City in July, probably European in origin and remarkable as being one of the few enemies of privet; *Corthylus punctatissimus*, long known as attacking the rootstock of huckleberry, but lately developing into a pest attacking the rhododendrons and azaleas; the specimens shown were found at Somerville, N. J., October 7, 1915, and sections showing their work near the ground were included; *Pinipestris zimmermanni* Grt., the pine shoot moth, from Eatontown, N. J., August 15; *Monarthropalpus buxi* Lab., the boxwood leaf miner, probably introduced from Holland.

Mr. Weiss exhibited also a Pierid, found alive in French nursery stock at Rutherford, N. J., December 1, which has been identified as *Gonepteryx rhamni* Linn., ♀, the brimstone butterfly, common in Europe, Asia and North Africa.

Mr. Leng exhibited a species of Staphylinid beetle of the tribe Omalini,

¹ JOUR. N. Y. ENT. SOC., VII, p. 22, 1899.

found at the edge of sphagnum swamp near Roselle Park, N. J., by Mr. H. G. Barber while sifting. The species appears to be new to the United States and allied to the European *Boreaphilus*, according to letters from Mr. E. A. Schwarz.

Mr. Leng also called attention to the articles by Paul Schulze in *Verhandlung der Deutschen Zoologischen Gesellschaft*, 1913, on the composition and reaction to alkaline fluids of the tuberculate elytra of beetles, especially *Cicindela*, which may explain some differences observed and hitherto supposed to be of taxonomic importance.

Mr. Rich spoke of the flight of beetles when deprived of one or both elytra, citing some of the literature on the subject, and stating that from his experiments the elytra appeared to have a function similar to that of the planes of a flying machine.

His remarks were discussed by Dr. Lutz, Messrs. Davis, Schaeffer and Leng, the latter describing the use of the abdominal apex by Staphylinidæ in folding the elytra after a flight.

Mr. Davis said this was already known and referred to J. G. Wood, "Insects at Home," p. 66 (1872), where the process is described.

Dr. Lutz said the earwigs also use their forceps for the same purpose.¹

¹ Wood, p. 227, and "Flashlights of Nature," by Allen.